California Department of Transportation
District 11, P.O. Box 85406
San Diego, CA 92186-5406
ph: (619) 688-6670 Fax (619) 688-3695
www.dot.ca.gov/dist11

SAN DIEGO AND IMPERIAL COUNTIES

January 2003

I-15 (SR-163 to SR-78)
Operational Improvements & Managed Lanes

OVERALL GOALS

Manage congestion and reduce delays on Interstate 15 (I-15) between State Route 163 (SR-163) and SR-78 by optimizing and increasing both freeway capacity and transportation alternatives in the corridor.

PURPOSE AND NEED

Interstate 15 has serious congestion problems affecting commuters, businesses, and regional goods movers. Average daily traffic (ADT) on the corridor ranges from 170,000 to 290,000 vehicles, with daily commute delays ranging from 30 to 45 minutes. In addition, due to a lack of adjacent parallel routes, I-15 is subject to additional delays during rainy days, incidents, or special events. Traffic delays will increase as the regional economy and populations expand along the corridor. By year 2020, volumes are expected to approach 380,000 ADT, with commute delays ranging from 80 to 90 minutes if no transportation improvements are implemented. Caltrans, the Metropolitan Transit Development Board (MTDB), and the San Diego Association of Governments (SANDAG) are working together on various solutions needed to address these issues.

PROPOSALS

Operational Improvements

There are many operational improvements underway on the corridor. Primary among these is construction of auxiliary and added lanes where congestion regularly occurs. These lanes will add capacity at "bottleneck" locations, and facilitate entering and exiting the freeway allowing the corridor to operate optimally. In addition, improvements at the I-15/SR-56 interchange are being pursued to accommodate the future SR-56 gap closure.

Finally, a fully coordinated Transportation Management System linked via a fiber-optic network is planned (and partially in place) including ramp meters, closed circuit television cameras, and changeable message signs.

Managed Lanes (Capacity and Transit Improvements)

Other improvements involve increasing freeway capacity and transit opportunities. As about 15% of corridor vehicles are carpoolers (high occupancy vehicles, HOVs), enhancing both freeway and HOV facilities is necessary to effectively address congestion. Therefore, a strategy called Managed Lanes is being pursued to provide additional capacity for single occupancy vehicles (SOVs), while still giving preference to buses and carpools. Caltrans and SANDAG are also coordinating with FHWA on allowing SOV use of excess capacity for a fee.

The Managed Lanes will be constructed mostly within the existing freeway median, though some outside widening is required. Managed Lane traffic will flow in both directions. For example, using a four-lane configuration the morning commute could have three lanes southbound and one northbound. Using a movable median barrier like that on the San Diego-Coronado Bay Bridge, the Managed Lanes could then be reconfigured to three lanes northbound and one lane southbound for the evening commute. The lanes could also be configured to handle incidents or special events. Fixed concrete barriers would separate the managed lanes from the main lanes, with access openings at two- to three-mile intervals.

An integral part of the Managed Lanes is the Bus Rapid Transit (BRT) System--a system of transit routes connecting residential areas with major employment centers along the corridor. Preferential access to the managed lanes will allow buses to provide high-speed, "rapid" service. Bus Rapid Transit Centers (BRTCs) are planned adjacent the freeway in Mira Mesa, Sabre Springs, Rancho Bernardo, near North County Faire, and in Escondido.

In addition, the stations will have 'park & ride' lots for carpoolers and will be connected to the managed lanes via direct-access ramps, allowing buses and HOVs to quickly bypass freeway on-ramps.

PROPOSALS

Managed Lanes (Capacity and Transit Improvements) cont.
The BRT System provides needed transportation alternatives to SOVs, thereby reducing demand and congestion on the corridor.

Long-Range Plans
MTDB will conduct future studies of long-range transit needs in the corridor, including the feasibility of light rail transit (LRT) between Escondido and downtown San Diego, as well as an HOV lane / BRT System between State Route 163 and Interstate 5.

ENVIRONMENTAL STATUS

The environmental goal for the Operational Improvements and Managed Lanes is to mitigate all impacts. Studies (including noise, visual, biological, air and water quality, cultural, and socioeconomic) covering the cumulative effects of these improvements have been completed. Operational Improvements having no substantial environmental impacts are continuing to design and construction. The remaining Operational Improvements, along with the Managed Lanes, are covered in the Draft Environmental Document (DED, completed October 2002). Public circulation, review and comments on the DED are expected to be addressed, and the Final Environmental Document finalized, by December 2002.

Community outreach
is ongoing and will continue as specific proposals move forward. Public input is welcomed throughout this development process.

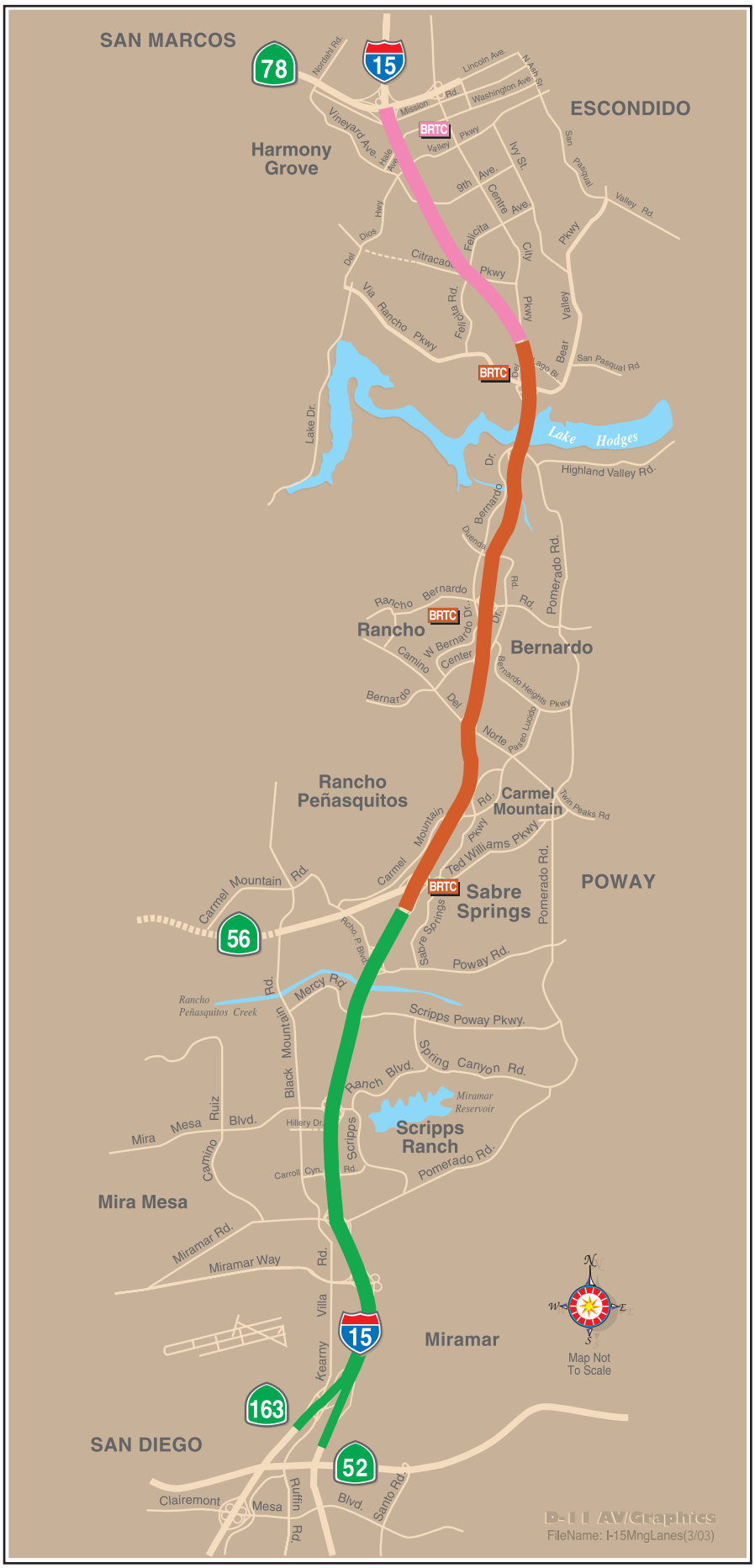
COSTS, FUNDING, AND SCHEDULES

Funding is being aggressively sought and will come from various federal, state, local and private sources.

Operational Improvements SR-52 to SR-78	**Capital + Support (in current year Million $)**	**Funding Identified (in current year Million $)**	**Open to Traffic (Year)**
Total	115	105	1999-2005

Managed Lanes	Capital + Support Costs (in current year Million $)	Funding Identified (in current year Million $)	Open to Traffic
North Segment Centre City Parkway to SR-78	140	5	to be determined
Middle Segment SR-56 to Centre City Pkwy	375	375	2005 - 2007
South Segment SR-163 to sR-56	230	10	to be determined

MANAGED LANES



District 11 | MTDB | SANDAG — San Diego's Regional Planning Agency

LEGEND

(Million $)

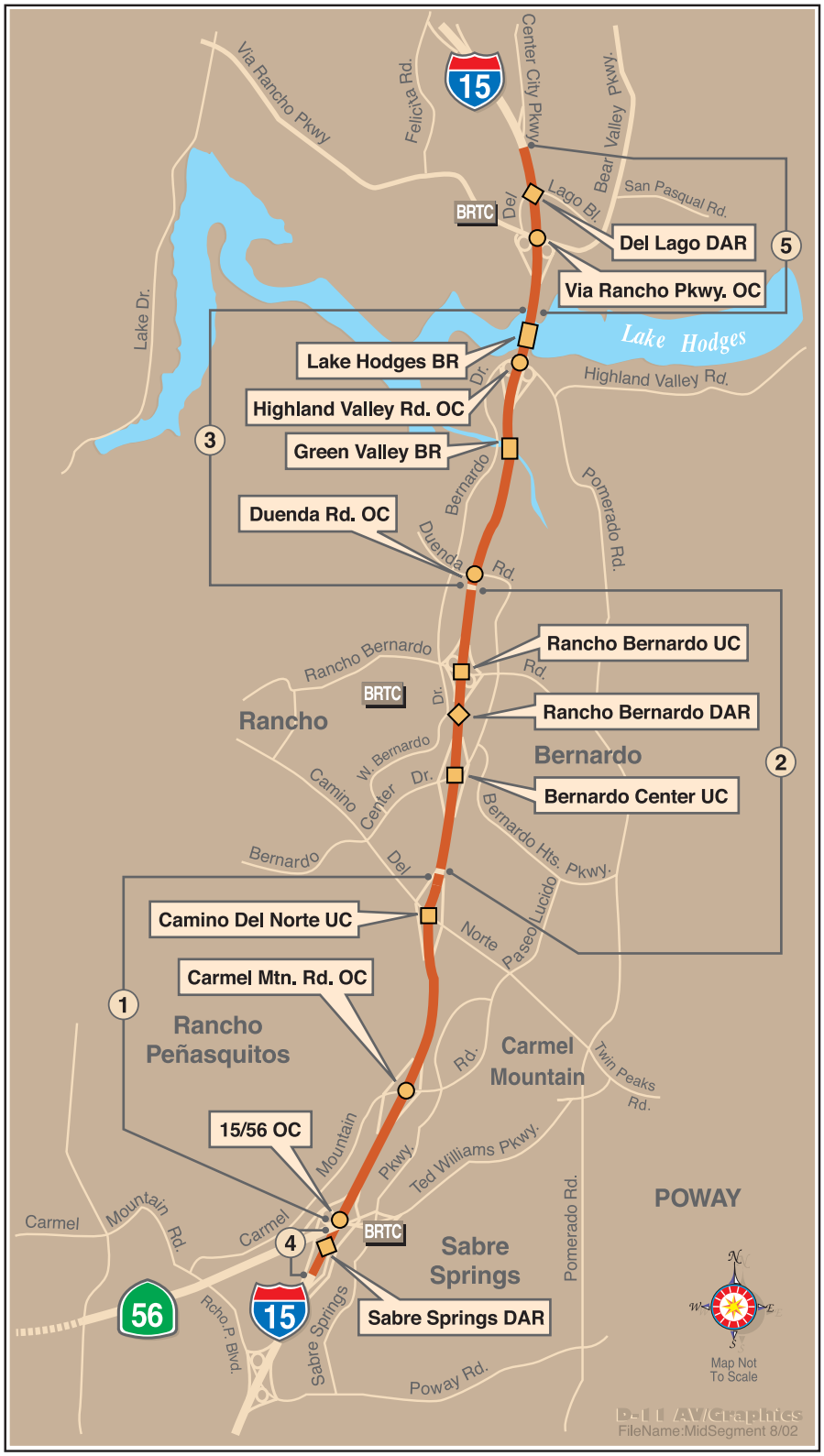
Segment	Description	Cost	Funding	Constr.
North				
Freeway	Centre City Pkwy to SR-78	$123	STIP-RIP $5	TBD
BRTC	Escondido	$25	$0	TBD
Middle				
Freeway	SR-56 to Centre City Pkwy	$324	TCRP STIP-IIP STIP-RIP SHOPP RSTP CMAQ GARVEE-RIP GARVEE-IIP	2003/ 2007*
BRTC	Del Lago Rancho Bernardo Sabre Springs	$51	TCRP CMAQ	2003/ 2006*
South				
Freeway	SR-163 to SR-56	$210	STIP-RIP $10	TBD
BRTC	TBD	TBD	$0	TBD

* Interim NB Open to Traffic in 2006

TBD = To Be Determined

April 2003

Managed Lanes Middle Segment
FREEWAY STAGING



District 11

SANDAG
San Diego's Regional Planning Agency

MTDB

LEGEND

Unit	Cost	Work Location	Construction Dates
5	$56m	Lake Hodges to Center City Pkwy.	Jan. 2004 to Dec. 2007
3	$90m	Duenda Rd. to Lake Hodges	April 2004 to Dec. 2007
2	$61m	Camino Del Norte to Duenda Rd.	Jan. 2004 to June 2007
1	$66m	15/56 to Camino Del Norte	Sept. 2003 to March 2007
4	$35m	South of 15/56 to 15/56	Oct. 2004 to July 2007
Total	$324m	Other Costs: $8m Bio-Mitigation; $8m PR/ED	Corridor

*Interim NB Open to Traffic in 2006

Bridges

- BR = Bridge
- UC = Undercrossing
- OC = Overcrossing
- DAR = Direct Access Ramps

BRTC = Bus Rapid Transit Center (by MTDB)

April 2003